

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	16017	(ion near10 exchange) and (cation near10 exchange and anion near10 exchange)	US-PGPUB; USPAT	OR	OFF	2012/01/12 07:06
L2	5547	(ion near10 exchange) and (cation near5 exchange near5 resin) and (anion near5 exchange near5 resin)	US-PGPUB; USPAT	OR	OFF	2012/01/12 07:06
L3	106	(ion near10 exchange) and (cation near5 exchange near5 resin) and (anion near5 exchange near5 resin) and (polythiophene and solvent)	US-PGPUB; USPAT	OR	OFF	2012/01/12 07:07
L4	12	(column near20 ion near10 exchange) and (cation near5 exchange near5 resin) and (anion near5 exchange near5 resin) and (polythiophene and solvent)	US-PGPUB; USPAT	OR	OFF	2012/01/12 07:07
L5	2	(column near20 ion near10 exchange) and (cation near5 exchange near5 resin) and (anion near5 exchange near5 resin) and (polythiophene and solvent) and velocity	US-PGPUB; USPAT	OR	OFF	2012/01/12 07:07
L6	2	(column near20 ion near10 exchange) and (cation near5 exchange near5 resin) and (anion near5 exchange near5 resin) and (polythiophene and solvent) and (space near5 velocity)	US-PGPUB; USPAT	OR	OFF	2012/01/12 07:07
L7	102	(column near20 ion near10 exchange) and (cation near5 exchange near5 resin) and (anion near5 exchange near5 resin) and (space near5 velocity)	US-PGPUB; USPAT	OR	OFF	2012/01/12 07:07
L8	2	(column near20 ion near10 exchange) and (cation near5 exchange near5 resin) and (anion near5 exchange near5 resin) and (space near5 velocity) and (conductive near5 polymer)	US-PGPUB; USPAT	OR	OFF	2012/01/12 07:07
L9	25	(column near20 ion near10 exchange) and (cation near5 exchange near5 resin) and (anion near5 exchange near5 resin) and (space near5 velocity) and polymer and solvent	US-PGPUB; USPAT	OR	OFF	2012/01/12 07:20
L10	93	(column near20 ion near10 exchange) and (space near5 velocity) and polymer and solvent	US-PGPUB; USPAT	OR	OFF	2012/01/12 07:21
L11	2	(column near20 ion near10 exchange) and (space near5 velocity) and (polythiophene)	US-PGPUB; USPAT	OR	OFF	2012/01/12 07:21
L12	23	(column near20 ion near10 exchange) and (space near5 velocity) and (polymer and solvent and dispersion)	US-PGPUB; USPAT	OR	OFF	2012/01/12 07:21

S1	3	("20020173579"   "5300575"   "5567355").PN.	US-PGPUB; USPAT	OR	OFF	2009/01/26 14:05
S2	6	((TADAYUKI) near2 (ISAJI)).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/01/26 14:11
S3	86	((OSAMU) near2 (FUJIMOTO)).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/01/26 14:12
S4	16	((TADAYUKI) near2 (ISAJI)).INV.	EPO; JPO; DERWENT	OR	OFF	2009/01/26 14:12
S5	197	((OSAMU) near2 (FUJIMOTO)).INV.	EPO; JPO; DERWENT	OR	OFF	2009/01/26 14:12
S6	1	"02500918"	US-PGPUB; USPAT	OR	OFF	2009/01/26 14:41
S9	113	("4147550"   "4731408"   "4910645"   "4959430"   "4987042"   "5035926").PN. OR ("5300575").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/01/26 14:55
S10	50	("6849800" "20080097009" "5494609" "5973050" "5911930" "6228492" "20060175582" "20050097678" "4838634" "4988443" "5498761" "6632380" "20020166681" "20040022003" "20050095410" "20070267747" "20070275159" "3770604" "3862894" "3892647" "4326238" "4547311" "6117225" "6156449" "6919143" "7163746" "20020039680" "20030006401" "20030015691" "20030164477" "20030232188" "20040028806" "20050053801" "20060249769" "20070034052" "20080293855" "5034463" "5093033" "5985180" "7321012" "20050176592" "5476612" "5871671" "6127033" "6328874" "6818118" "6887556" "7294961" "7380500" "20030170454" ).pn.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 08:40
S11	148934	deionization or (ion adj exchange)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:08
S12	112867	(intrinsically adj conductive adj polymer) or polyaniline or polythiophene or aniline	US-PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:08
S13	9791	S11 and S12	US-PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:08
S15	1136	organic adj solvent adj dispersion	US-PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:09
S16	38	S13 and S15	US-PGPUB;	OR	OFF	2009/01/27 10:09

			USPAT; USOCR			
S18	265	dispersion near (polythiophene or polyaniline)	US- PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:14
S19	148934	deionization or (ion adj exchange)	US- PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:14
S20	74	S18 and S19	US- PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:14
S21	885671	alcohol or methylpyrrolidone or amide or ketone	US- PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:14
S22	65	S20 and S21	US- PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:14
S23	9	("4380590"   "4499150"   "4707515"   "5069820"   "5281363"   "5371182"   "5376728"   "6060116"   "6399675").PN. OR ("7033639").URPN.	US- PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:20
S24	6378	252/500, 524/439, 524/401.OCLS.	US- PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:52
S25	5804	252/500, 528/373.OCLS.	US- PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:57
S26	410	S11 and S24	US- PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:57
S27	443	S11 and S25	US- PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 10:57
S28	3	"7008562"	US- PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 11:20
S29	10	("20030215571"   "4711742"   "4910645"   "5300575"   "5403467"   "6084040"   "6692662"   "6692663").PN. OR ("7008562").URPN.	US- PGPUB; USPAT; USOCR	OR	OFF	2009/01/27 11:21
S30	28	"5567355"	USPAT	OR	OFF	2009/01/27 16:24
S31	6246	(organic near2 solvent near2 dispersion)	US- PGPUB; USPAT	OR	OFF	2011/05/02 11:56
S32	19232	(organic near2 solvent) near20 (dispersion)	US- PGPUB; USPAT	OR	OFF	2011/05/02 11:56

S33	203	(Dope near10 polyaniline) or (dope near10 polythiophene)	US-PGPUB; USPAT	OR	OFF	2011/05/02 11:57
S34	217	(Dope near10 polyaniline) or (dope near10 polythiophene)	US-PGPUB; USPAT	OR	OFF	2011/05/02 11:57
S35	5	S31 and S34	US-PGPUB; USPAT	OR	OFF	2011/05/02 11:57
S36	222	(column near10 fill) and (ion near10 exchange) and (water)	US-PGPUB; USPAT	OR	OFF	2011/05/02 11:58
S37	0	S35 and S36	US-PGPUB; USPAT	OR	OFF	2011/05/02 11:58
S38	0	(column near10 fill) and (ion near10 exchange) and (water) and (organic adj water)	US-PGPUB; USPAT	OR	OFF	2011/05/02 11:58
S39	0	((Dope near10 polyaniline) or (dope near10 polythiophene)) and deionize and (water) and (column or ion)	US-PGPUB; USPAT	OR	OFF	2011/05/02 11:59
S40	0	((Dope near10 polyaniline) or (dope near10 polythiophene)) and deionize and water	US-PGPUB; USPAT	OR	OFF	2011/05/02 11:59
S41	217	((Dope near10 polyaniline) or (dope near10 polythiophene))	US-PGPUB; USPAT	OR	OFF	2011/05/02 11:59
S42	6	(dope near10 polymer) and (reduce near10 water) and (column) and (ion near2 exchange)	US-PGPUB; USPAT	OR	OFF	2011/05/02 12:00
S43	0	S32 and S42	US-PGPUB; USPAT	OR	OFF	2011/05/02 12:00
S44	9	(dope near10 polyaniline) and (column) and (ion near2 exchange) and (organic near2 solvent)	US-PGPUB; USPAT	OR	OFF	2011/05/02 12:06
S45	99	(ultrafiltration) near30 (deionization)	US-PGPUB; USPAT	OR	OFF	2011/05/02 12:32
S46	47	((ultrafiltration) near30 (deionization)) and (dispersion)	US-PGPUB; USPAT	OR	OFF	2011/05/02 12:32
S47	133	(polyaniline) near20 (cation)	US-PGPUB; USPAT	OR	OFF	2011/05/02 12:40
S48	58	(polyaniline) near5 (cation)	US-PGPUB; USPAT	OR	OFF	2011/05/02 12:40
S49	17	(polyaniline) near2 (cation)	US-PGPUB; USPAT	OR	OFF	2011/05/02 12:40
S50	1	"20110020604"	DERWENT	OR	OFF	2011/05/02 12:43
S51	119	(ultrafiltration) near20 deionization	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 12:45

S52	8499	dispersion and polyaniline	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 12:45
S53	5	S51 and S52	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 12:45
S54	3	"2005070972"	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 12:46
S55	5	ultrafiltration	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 12:47
S56	57503	ultrafiltration	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 12:47
S57	0	S54 and S56	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 12:52
S58	532375	filtration	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 12:52
S59	0	S54 and S58	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 12:52
S60	3	"7683124"	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 12:52
S61	532375	filtration	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 12:52
S62	2	S60 and S61	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 12:53
S63	0	"200302152811"	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 13:02
S64	3	"20030215281"	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 13:03
S65	84	(ultrafiltration) near5 deionization	US-PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 13:04
S66	26702	polyaniline	US-PGPUB; USPAT;	OR	ON	2011/05/02 13:04

			DERWENT			
S67	4	S65 and S66	US- PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 13:04
S68	38	((ultrafiltration) near5 deionization) near10 (particle or water)	US- PGPUB; USPAT; DERWENT	OR	ON	2011/05/02 13:05
S69	2	"6280854"	US- PGPUB; USPAT	OR	OFF	2011/05/03 11:47
S70	2	"6280854"	US- PGPUB; USPAT	OR	OFF	2011/05/03 11:59
S71	12	"6203727"	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:00
S72	1	"20100038596"	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:00
S73	0	"200507098596"	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:00
S74	0	"2005070972"	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:00
S75	0	"2005070972"	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:00
S76	1	"20050070972"	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:00
S77	2	"7683124"	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:01
S78	2	"20030065090"	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:02
S79	23	"4216185"	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:02
S80	2	"5977190"	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:02
S81	2	"20080264772"	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:02
S82	1	"20100038596"	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:05
S83	230799	column and ion	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:18
S84	1	S70 and S83	US- PGPUB; USPAT	OR	OFF	2011/05/03 12:18

S85	0	S71 and S84	US-PGPUB; USPAT	OR	OFF	2011/05/03 12:26
S86	2	S71 and S83	US-PGPUB; USPAT	OR	OFF	2011/05/03 12:26
S87	2	"20020173579"	US-PGPUB; USPAT	OR	OFF	2011/05/03 12:46
S88	11	("20030215571"   "4711742"   "4910645"   "5300575"   "5403467"   "6084040"   "6692662"   "6692663").PN. OR ("7008562").URPN.	US-PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 12:47
S89	1770	deionize	US-PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:04
S90	0	S88 and S89	US-PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:04
S91	186387	ion near10 exchange	US-PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:04
S92	276	(column near10 exchange) and (conductive near2 polymer)	US-PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:14
S93	2793	(column near10 exchange) and (aniline)	US-PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:14
S94	133	(column near10 exchange) and (polyaniline)	US-PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:14
S95	76	(column near2 exchange) and (polyaniline)	US-PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:14
S96	82	(column near2 ion near10 exchange) and (polyaniline)	US-PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:14
S97	82	(column near2 ion near4 exchange) and (polyaniline)	US-PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:14
S98	31	(column near2 exchange) and (polyaniline) and dispersion	US-PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:14
S99	10	(column near2 exchange) and (polyaniline) and dispersion and (remove near10 water)	US-PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:15
S100	41	(column near5 ion near5 exchange	US-	NEAR	ON	2011/05/03

		near5 resin) and (polyaniline)	PGPUB; USPAT; USOCR			13:19
S101	5708	(column near5 ion near5 exchange near5 resin)	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:22
S102	40	(column near5 ion near5 exchange near5 resin) near20 purify	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:22
S103	34	(column near5 ion near5 exchange near5 resin) near10 purify	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 13:28
S104	186387	(ion near10 exchange)	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 14:36
S105	2	"5,977190"	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 15:25
S106	46812	ultrafiltration	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 15:26
S107	1	S105 and S106	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 15:26
S108	2	"20030065090"	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 15:27
S109	2	S106 and S108	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 15:28
S110	8	"6113683"	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 15:47
S111	1	"20090264575"	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 15:47
S112	15	"5912283"	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 15:48
S113	1	"20060154904"	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 15:48
S114	2	"20060252881"	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 16:01



S115	1	"20070015873"	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 16:01
S116	10	"6022911"	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/03 16:01
S117	12	"6203727"	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/04 00:28
S118	1	"20030195962"	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/04 00:28
S119	2	"20030065090"	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/04 00:28
S120	1	"20100038596"	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/04 00:31
S121	3281	fries.inv.	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/04 00:33
S122	43841	column near10 ion	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/04 00:33
S123	16	S121 and S122	US- PGPUB; USPAT; USOCR	NEAR	ON	2011/05/04 00:33
S124	0	"20030196962"	USPAT	NEAR	ON	2011/05/04 00:35
S125	1	"20030196962"	US- PGPUB; USPAT	NEAR	ON	2011/05/04 00:35

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